

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/656,570	09/05/2003		Reginald A. Goodman	EXOB-216R-1	7854
24119	7590	11/24/2004		EXAMINER	
SHERMAN D PERNIA, ESQ., PC 1110 NASA ROAD ONE				FIELDS, COURTNEY D	
SUITE 450			ART UNIT	PAPER NUMBER	
HOUSTON TX 77058-3310					

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/656,570	GOODMAN ET AL.				
		Examiner	Art Unit				
		Courtney D. Fields	2137				
Period fo	The MAILING DATE of this communication apports.  or Reply	pears on the cover sheet with the c	orrespondence address				
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. msions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin ly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from b, cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on <u>05 S</u>	September 2003.					
2a)	This action is <b>FINAL</b> . 2b)⊠ This	s action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□	Claim(s) <u>1-26</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) <u>1-26</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.					
Applicat	ion Papers						
9)[	The specification is objected to by the Examine	er.					
10)	0)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	= : .					
Priority (	under 35 U.S.C. § 119						
a)(	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea See the attached detailed Office action for a list	ts have been received. Is have been received in Applicati Inity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachmen		_					
	e of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da					
3) 🛛 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date <u>06 October 2003</u> .	<del></del>	Patent Application (PTO-152)				

Art Unit: 2137

#### **DETAILED ACTION**

Page 2

1. Claims 1-26 are pending.

2. The Information Disclosure Statement respectfully submitted on 06 October 2003 has been considered by the Examiner.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 19-22, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Touboul (U.S. Patent No. 6,480,962). As per claim 1, Touboul discloses an intrusion secure computer system comprising: a CPU, a data storage means, a memory means, an operating system, a virtual machine operating system, and at least one I/O connection in operative communication with a data source in Column 3, lines 9-40.

As per claim 2, Touboul discloses the claimed limitation wherein the data source is a global computer network in Column 2, lines 61-64.

As per claim 3, Touboul discloses the claimed limitation wherein the data source is other than a global computer network in Column 4, lines 19-29.

Art Unit: 2137

As per claim 4, Touboul discloses the claimed limitation wherein the data source is other than a global computer network is at least one data source selected from the group consisting of: a computer workstation, a personal-type computer, a computer dock, a local area network, an intranet, and a wide area network in Column 2, lines 61-67, Column 3, lines 1-3.

As per claim 5, Touboul discloses the claimed limitation wherein the virtual machine operating system comprises software for defining a virtual machine environment in memory and a virtual drive in storage, and operational control software limiting operative communication with the data source to the virtual machine environment and the virtual machine drive in Column 3, lines 52-63.

As per claims 6 and 26, Touboul discloses a method for securing a computer system from intrusion from an external data source comprising the steps of: providing an intrusion secure computer system of claim 1, initiating an external data source interface session, and causing activation of a virtual machine operating system of claim 1, and defining a virtual machine environment in memory and a virtual drive in storage, and establishing connectivity with the external data source under control of the virtual machine operating system to isolate operative communication with the external data source to the virtual machine environment and the virtual drive to secure the computer system from intrusion from the external data source in Column 3, lines 52-67, Column 4, lines 1-49.

As per claim 19, Touboul discloses the claimed limitation wherein the isolated operating environment computer code includes code checking and setting the isolated operating environment runtime requirements in Column 3, lines 4-8.

As per claim 20, Touboul discloses the claimed limitation wherein the isolated operating environment computer code includes code checking and setting the isolated operating environment runtime requirements to provide at least two run modes in Column 3, lines 40-50.

As per claim 21, Touboul discloses the claimed limitation wherein the isolated operating environment computer code includes code checking and setting the isolated operating environment runtime requirements to provide at a run mode with inet access and a run mode without inet access in Column 5, lines 50-60, Column 6, lines 33-48.

As per claim 22, Touboul discloses the claimed limitation wherein the isolated operating environment computer code includes code checking and setting the isolated operating environment exit requirements in Column 4, lines 50-67, Column 5, lines 1-2.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 7-18, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Touboul in view of White et al. (U.S. Patent No. 6,526,488). As per claim 1, Touboul discloses the invention as claimed above. However, Touboul does not explicitly

Art Unit: 2137

disclose controlling access to corrupt information on a computer system caused by a PC virus. As per claim 7, White et al. discloses a software application installable on a personal computer, the software protecting the computer's primary data files from being accessed by malicious code from an external data source, the software comprising: computer code for a isolated operating environment, and computer code for a secondary operating system functional within the isolated operating environment in Column 9, lines 11-31.

As per claim 8, White et al. discloses the claimed limitation wherein the isolated operating environment computer code includes POS permission code for modifying the POS permissions in Column 9, lines 1-6.

As per claim 9, White et al. discloses the claimed limitation wherein the secondary operating system computer code includes POS permission code for modifying POS external data source related access permissions in Column 9, lines 7-9.

As per claim 10, White et al. discloses the claimed limitation wherein the external data source is at least one source selected from the group consisting of a network node, an external node, and an I/O device in Column 10, lines 24-49.

As per claim 11, White et al. discloses the claimed limitation wherein the secondary operating system computer code includes POS permission code for modifying POS internet related permissions in Column 10, lines 41-49.

As per claim 12, White et al. discloses the claimed limitation wherein the secondary operating system computer code includes POS permission code for modifying POS Inet permissions in Column 6, lines 54-67, Column 7, lines 1-24.

Art Unit: 2137

As per claims 13 and 24, White et al. discloses the claimed limitation wherein the isolated operating environment computer code includes installation code for checking and setting the isolated operating environment in Column 7, lines 62-67.

As per claim 14, White et al. discloses the claimed limitation wherein the installation code checks for the current installation condition of the software application in Column 7, lines 24-35.

As per claim 15, White et al. discloses the claimed limitation wherein the installation code copies any files from the software application as are necessary in view of the check for current installation condition of the software application in Column 7, lines 52-59.

As per claim 16, White et al. discloses the claimed limitation wherein the installation code establishes short-cuts as are necessary in view of the check for current installation condition of the software application in Column 7, lines 36-51.

As per claim 17, White et al. discloses the claimed limitation wherein the isolated operating environment computer code includes code checking and setting the isolated operating environment start up requirements in Column 7, lines 6-15.

As per claims 18 and 25, White et al. discloses the claimed limitation wherein the isolated operating environment computer code includes code checking and setting the isolated operating environment start up requirements regarding "freshness" of the SOE files, allocation of volatile memory to the SOE, allocation of data storage to the SOE, READ ONLY condition of the primary operating system partitions and connections, state

of intranet activity, READ ONLY condition of user access to primary operating system partitions in Column 9, lines 32-67, Column 10, lines 1-20.

As per claim 23, White et al. discloses the claimed limitation wherein the isolated operating environment computer code includes code checking and setting the isolated operating environment exit requirements includes disconnecting (the SOE) from the inet, closing the node interface, freeing the SOE volatile memory allocation, flush the temporary data storage allocation, disconnect from any SOE files and partitions, refresh SOE boot file, and restore intranet connection in Column 8, lines 5-67.

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Touboul's intrusion system by combining White's method for controlling access and setting permissions preventing a PC virus. Motivation for such an implementation would enable the user to determine if a security violation existed prior to the virus which exists within the software applications.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fischman et al. (US Pub No. 2003/0097588) discloses a method and system for modeling analysis and display of network security events.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney D. Fields whose telephone number is 571-272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.

Art Unit: 2137

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdf

November 16, 2004

(Indrew Caldwell)
Andrew Caldwell

Page 8